In the claims:

Claims 1-15 (**canceled**)

16. (**currently amended**) A method of obtaining predominantly one enantiomer from a mixture of enantiomers, comprising the steps of:

    a. contacting an aqueous fibrous protein solution with a solvent that is not miscible with water, wherein the fibrous protein is selected from the group consisting of silk, collagens, keratins, actins, chorions, and seroins;

    b. allowing the solution in contact with the solvent to age at about room temperature or under conditions preventing evaporation or both;

    c. allowing the enantiomers of the mixture to diffuse selectively into the resulting fibrous protein smectic hydrogel in solution;

    d. removing the smectic hydrogel from the solution;

    e. rinsing predominantly a first enantiomer from the surface of the smectic hydrogel; and

    f. extracting predominantly a second enantiomer from the interior of the smectic hydrogel.

17. (**canceled**)

18. (**original**) The method of claim 16, wherein the fibrous protein is silk.

19. (**original**) The method of claim 16, wherein the fibrous protein solution is present in greater than about 4% by weight.

20. (**original**) The method of claim 16, wherein the fibrous protein solution is present in greater than or equal to about 8% by weight.

21. (**original**) The method of claim 16, wherein the fibrous protein solution is present in greater than about 4% by weight and the fibrous protein is silk.

22. (**original**) The method of claim 16, wherein the fibrous protein solution is present in greater than or equal to about 8% by weight and the fibrous protein is silk.

23. (**original**) The method of claim 16, wherein the smectic hydrogel is a bulk solid hydrogel comprising several ordered layers of the fibrous protein.

Claims 24-48 (**canceled**)

49. (**new**) The method of claim 16, wherein the solvent is selected from the group consisting of hexane, chloroform, and iso-amyl alcohol.